

REMARKS

The Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the following remarks.

Claims 1-26 are currently pending in the application. Claims 1 and 14 have been amended.

Support for the amendments to the claims can be found in the claims as originally filed. No new matter has been added by the amendments to the specification or the claims.

Claims 1-26 were rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the invention was filed, had possession of the claimed invention.

Claims 1-26 were rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims, as amended, are fully compliant with all the requirements of §112 including the requirements of §112, first and second paragraph.

A brief description of the present invention may be of assistance to distinguishing the claimed invention from the disclosures of the cited references taken alone or in combination.

The present invention provided amino resin compositions suitable for cleaning molds, wherein the amino resin contains at least one methylol-containing amino resin. Moreover, the amino resin composition comprises a thermosetting resin (30-60 weight % of the amino resin

composition) and a methylol-containing amino resin (40-70 weight % of the amino resin composition). The amino resin composition further has at least 75% weight percent of solids.

Claims 1, 2, 14, and 15 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Farkas et al (U.S. Patent 4,785,073).

Claims 3-13 and 16-26 were rejected under 35 U.S.C. §103(a) as being allegedly obvious over Farkas et al (U.S. Patent 4,785,073).

As the reference is understood, Farkas teaches that the molar ratio of melamine to phenol is in the range of from 1:4.7 to 1:0.29. For one mole of melamine, there are 1.5 to 3 moles of formaldehyde, and for one mole of phenol there are 1.2 to 2 moles of formaldehyde. Thus, Farkas provides in example 1 a resin in which the molar ratio of melamine to phenol to formaldehyde is 1.0:3.4:8.4.

Thus Farkas does not teach or suggest a resin composition comprising a methylol-containing resin having at least 75% wt. of solid content. Moreover, with reference to example I of Farkas it can be calculated that the molar ratio of (Phenol+formaldehyde): melamine is 11.8:1, which is not located within the range of 1.0 to 6.0 as defined in the specification of the present invention as a suitable range of phenol+formaldehyde to melamine ratios (see, page 3, lines 17-20).

One skilled in the art would not have been motivated based on the teaching of Farkas to increase the weight percentage of solids in the resins disclosed by Farkas to be greater than 75%. Farkas relates to resin compositions which are suitable for use in a foaming compositions such that an increased solid concentration would be detrimental to such applications. Farkas neither discloses nor suggests that the resins disclosed therein are suitable for molding applications. Moreover, Farkas fails to teach or suggest that any amino resin compositions comprising a methylol containing amino resin would be suitable for cleaning molds.

Thus, the methylol containing amino resin compositions of the present invention are neither disclosed nor suggested by the Farkas document. Moreover, Farkas fails to teach or suggest the use of the compositions of the instant invention for use in mold cleaning compositions.

Thus, claims 1 and 14 are patentable over Farkas. Claims 2-13 and 15-26 depend from claims 1 and 14 and are therefore also patentable over Farkas.

Claims 1, 2, 14, and 15 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Gunther et al (U.S. Patent 5,021,474).

Claims 3-13 and 16-26 were rejected under 35 U.S.C. §103(a) as obvious over Gunther et al (U.S. Patent 5,021,474).

As the reference is understood, Gunther teaches a molding composition comprising a melamine/formaldehyde resin, a melamine/phenol/formaldehyde resin or a mixture thereof and preferably containing 35 to 70 % by weight of the melamine resin based on the total weight of the composition. Thus, Gunther does not recite or suggest resin compositions comprising an methylol-containing amino resin or a resin composition having at least 75% by weight of solid content.

Gunther fails teach or suggest the instant amino resin composition comprising at least one methylol-containing amino resin. Moreover, Gunther fails to teach or suggest a resin composition which is suitable for use in cleaning molds. In contrast, the resins recited by Gunther are suitable for use in manufacturing electrical components. Thus, one skilled in the art would not have been motivated to modify the resins of Gunther for applications in cleaning molds.

Thus, claims 1 and 14 are patentable over Gunther. Claims 2-13 and 15-26 depend from claims 1 and 14 and are therefore also patentable over Gunther.

Claims 1, 2, 10, 14, 15, and 23 were rejected under 35 U.S.C. §102(b) as being allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Schmidt-Hellerau et al (U.S. Patent 4,978,711).

As the reference is understood, Schmidt-Hellerau teaches aqueous solutions containing a water soluble amino resin and the use of same for low-formaldehyde surface bonding applications. AS the reference is understood, Schmidt-Hellerau teaches water soluble amino resins prepared by condensation of melamine, urea, phenol, and formaldehyde having a molar ratio from 1.5 to 1.8 moles of formaldehyde, from 0.04 mole to 1.0 mole of melamine and from 0.015 to 0.05 mole of phenol per mole of urea, relative to the total amount of the amino resin. The aqueous amino resin solution is obtainable by mixing from 20 to 40% by weight of melamine/urea/phenol/formaldehyde condensate with from 60 to 80% by weight of a urea/formaldehyde condensate. The amino resin mixture has a solids content of from 60 to 80% by weight. However, based on the specification, Schmidt-Hellerau does not teach or suggest an amino resin composition which contains methylol functional groups.

Schmidt-Hellerau does not teach or suggest amino resin compositions comprising at least one methylol-containing amino resin and a thermosetting resin. Moreover, Schmidt-Hellerau neither discloses nor suggests any amino resin compositions which are suitable for use in cleaning molds. In contrast, Schmidt-Hellerau teaches amino rein mixtures which are suitable for use as a wood adhesive.

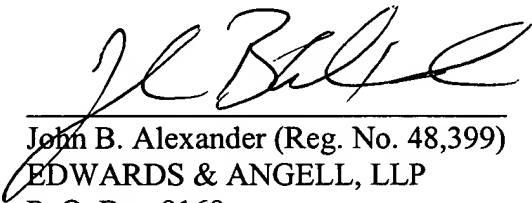
Thus claims 1, 2, 10, 14, 15, and 23 are patentable over the disclosure of Schmidt-Hellerau and the rejection of the claims, as amended, should be withdrawn.

The claims as amended are patentable, for at least the reasons discussed, over the prior art cited in the outstanding office action. Applicants respectfully request reconsideration and allowance of the claims.

Although it is not believed that any additional fees are needed to consider this submission, the Examiner is hereby authorized to charge our deposit account no. 04-1105 should any fee be deemed necessary.

Respectfully submitted,

Date: September 2, 2003



John B. Alexander (Reg. No. 48,399)
EDWARDS & ANGELL, LLP
P. O. Box 9169
Boston, MA 02209
Tel: (617) 439-4444
Fax: (617) 439-4170 / 7748